

ABSTRACT OF THE DISCLOSURE

A nonvolatile memory has plural memory blocks, each having a plurality of sub memory blocks, and is capable of programming to a first sub memory block within a first memory block and a second sub memory block within a second memory block in parallel. The first sub memory block has a management area for storing a management information including linking information between the first sub memory block corresponding sub memory blocks of other memory blocks. A control circuit controls reading the linking information from the first sub memory block in accordance with address information, and programming to the first sub memory block in accordance with the address information and corresponding sub memory blocks by the linking information.